OIST Seminar

Okinawa Institute of Science and Technology

SPEAKER

Prof. Tingli Ma

Graduate School of Life Science and Systems Engineering

Kyushu Institute of Technology, Kitakyusyu, Japan

tinglima@life.kyutech.ac.jp

Development of nano functional materials and their application in organic/inorganic hybrid solar cells

Friday, April 24, 2015 14:00 - 15:00

@ Meeting Room C016, Lab 1

Abstract:

Dye-sensitized solar cell (DSC) and perovskite solar cell (PSC) have attracted much attention due to their high-energy conversion efficiency and low production cost. Our group has done the studies on the DSC and PSC from the fundamentals to their application, including modification of photoanodes and development of new catalysts for counter electrodes. Specifically, we focused on the design of novel Pt-free CE catalytic materials. We developed a series of Pt-free CEs, such as carbon materials and transition metal catalysts.

In the lecture, I will introduce our recent results of development nano functional materials and their application in DSCs and PSCs.

Biography:

Tingli Ma received her Ph D. in Inorganic Chemistry from Department of Chemistry, Faculty of Science, Kyushu University, Japan, in 1999. She performed postdoctoral researches at the Kyushu Centre of Japan‘s National Institute of Advanced Industrial Science and Technology (AIST) from 1999-2004. Since 2004, she worked at Kyushu University in Japan as an assoc. professor. Since 2007, she became a full professor of Dalian University of Technology, China. In 2013, she came back to Japan as a full professor at Graduate School of Life Science and Systems Engineering, Kyushu Institute of Technology. She is interested in development of new nanomaterials and the third generation solar cells, photocatalyst and hydrogen production by solar energy.

For more information

Energy Materials and Surface Sciences Unit (Qi Unit)

Ayako Masaki ℡: (098) 966-1516 or email to: ayako.masaki@oist.jp